

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

AUGUST 1969

PART II—Fishing Information*

Sea-surface temperatures, fishing and research information
of interest to the West Coast tuna-fishing industry
and marine scientists

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U. S. Department of the Interior
Bureau of Commercial Fisheries
Fishery-Oceanography Center
P. O. Box 271
La Jolla, California 92037

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SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN
AUGUST 1969

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Charts

Figure 1. --Mean sea surface temperatures ($^{\circ}$ F) derived from approximately 8000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2. --Deviation of sea surface temperatures ($^{\circ}$ F) from long term charts of H. O. 225. Hatched areas are colder in 1969.

Figure 3. --Deviation of sea surface temperatures ($^{\circ}$ F) from those of August 1968. Hatched areas are colder in 1969.

Figure 4. --Sea surface temperatures ($^{\circ}$ F) by 1-degree squares, approximately 2000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

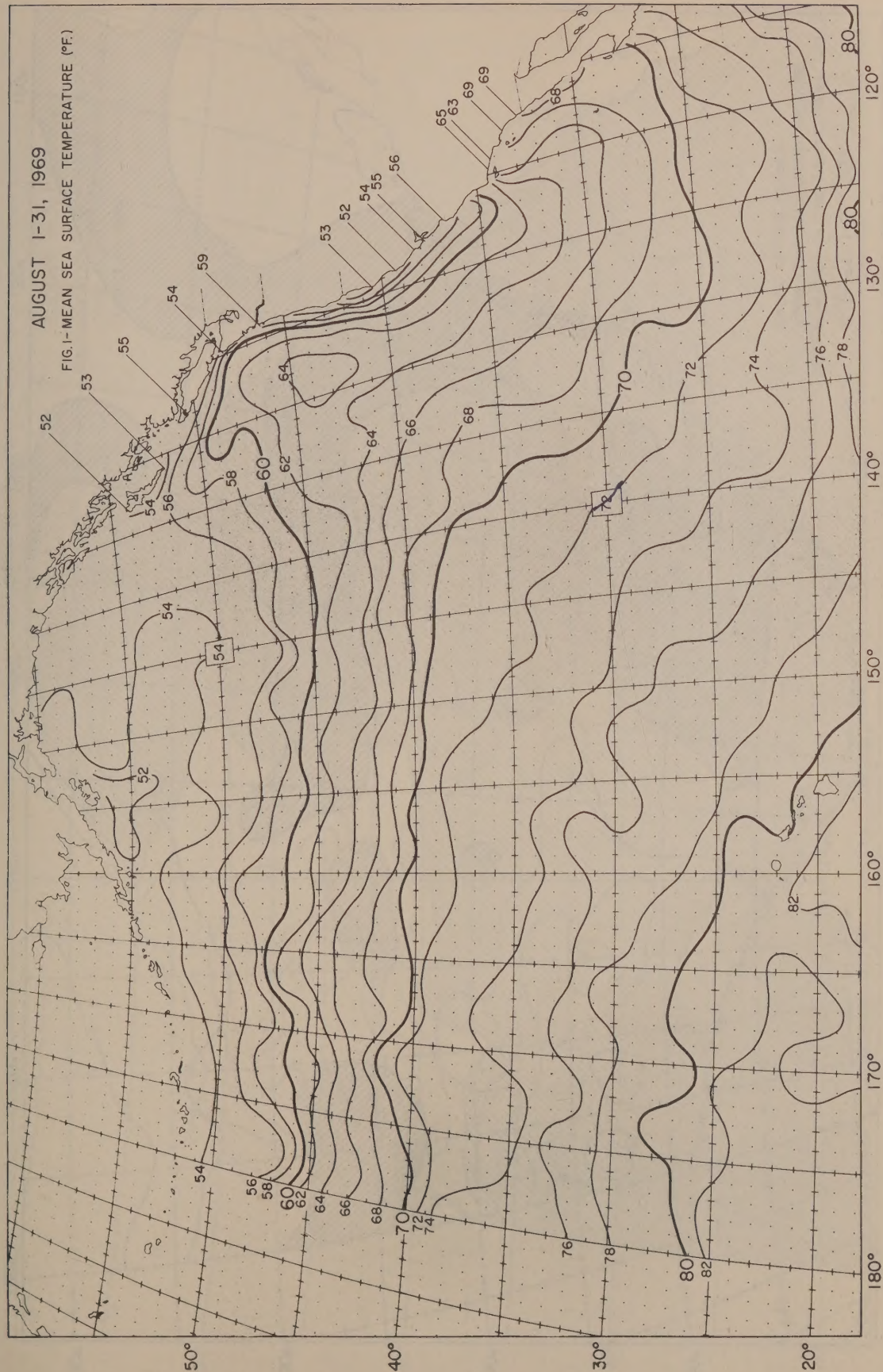
Figure 5. --Deviation of sea surface temperatures ($^{\circ}$ F) August 1969-August 1968 by 1-degree squares. Shaded areas are colder in 1969.

Figure 6. --Deviation of sea surface temperatures ($^{\circ}$ F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1969.

James A. Renner, Fishery Biologist
Kenneth S. Raymond, Scientific Illustrator
September 9, 1969

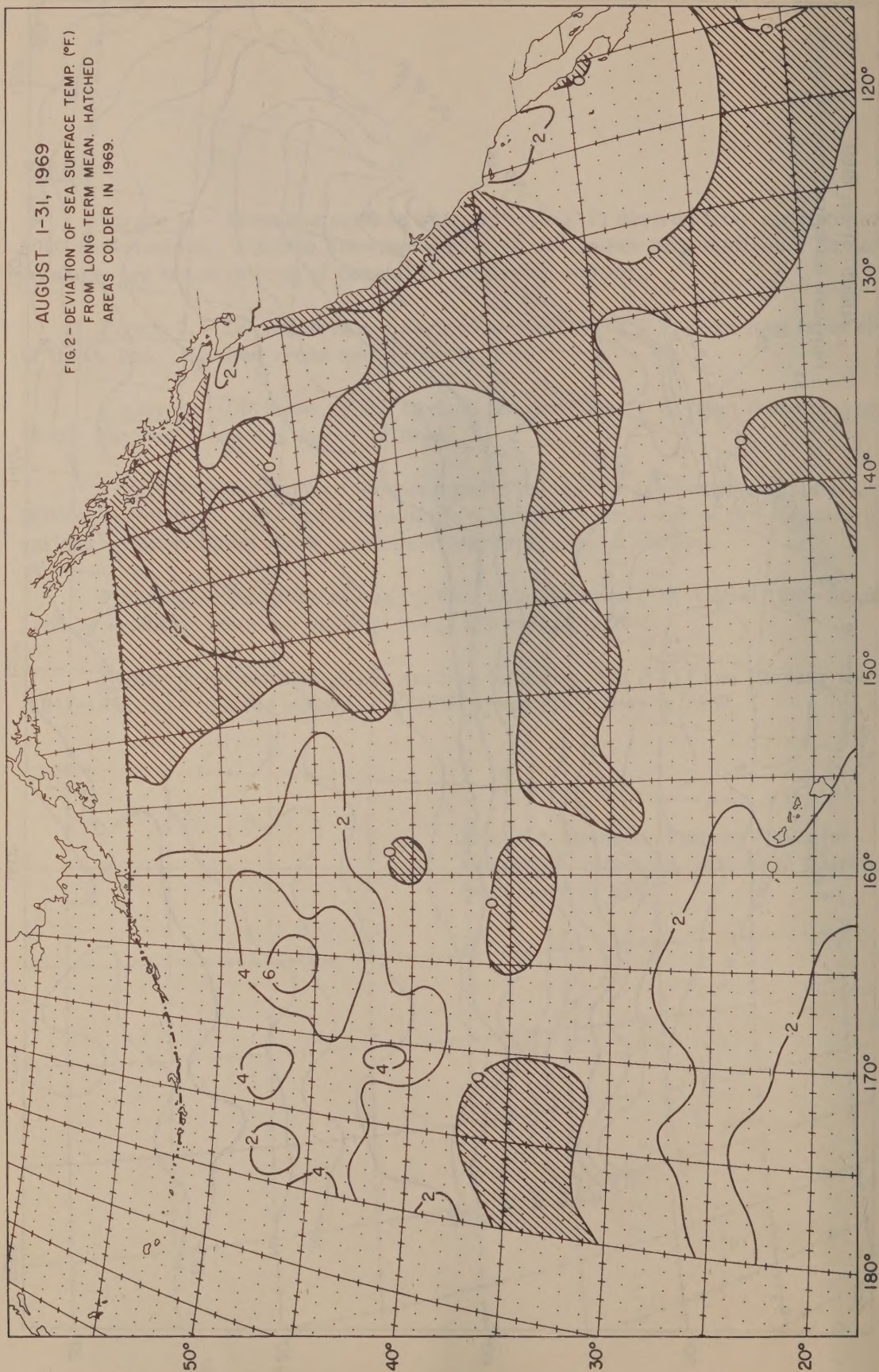
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FIG. 1-MEAN SEA SURFACE TEMPERATURE (°F.)



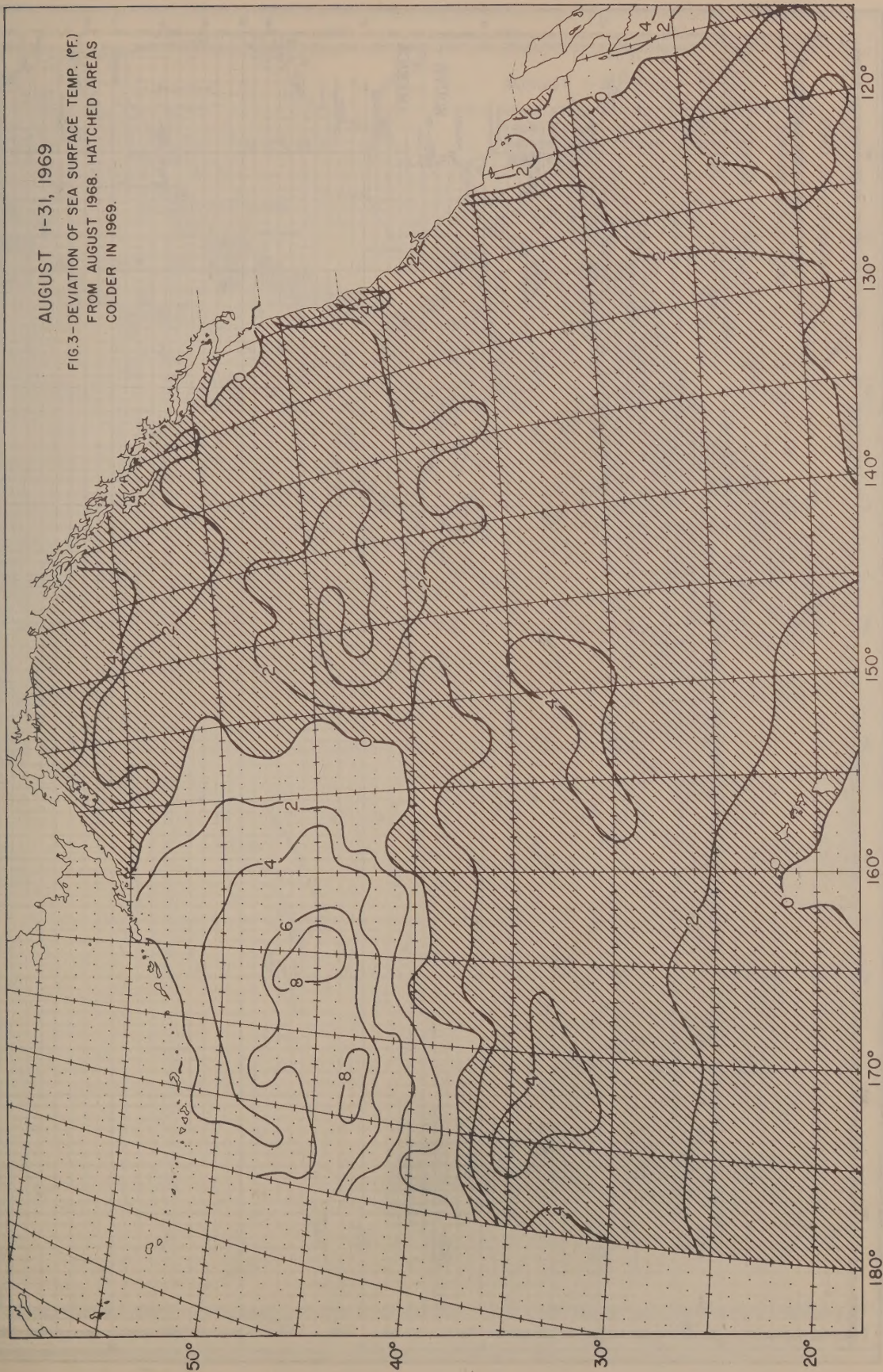
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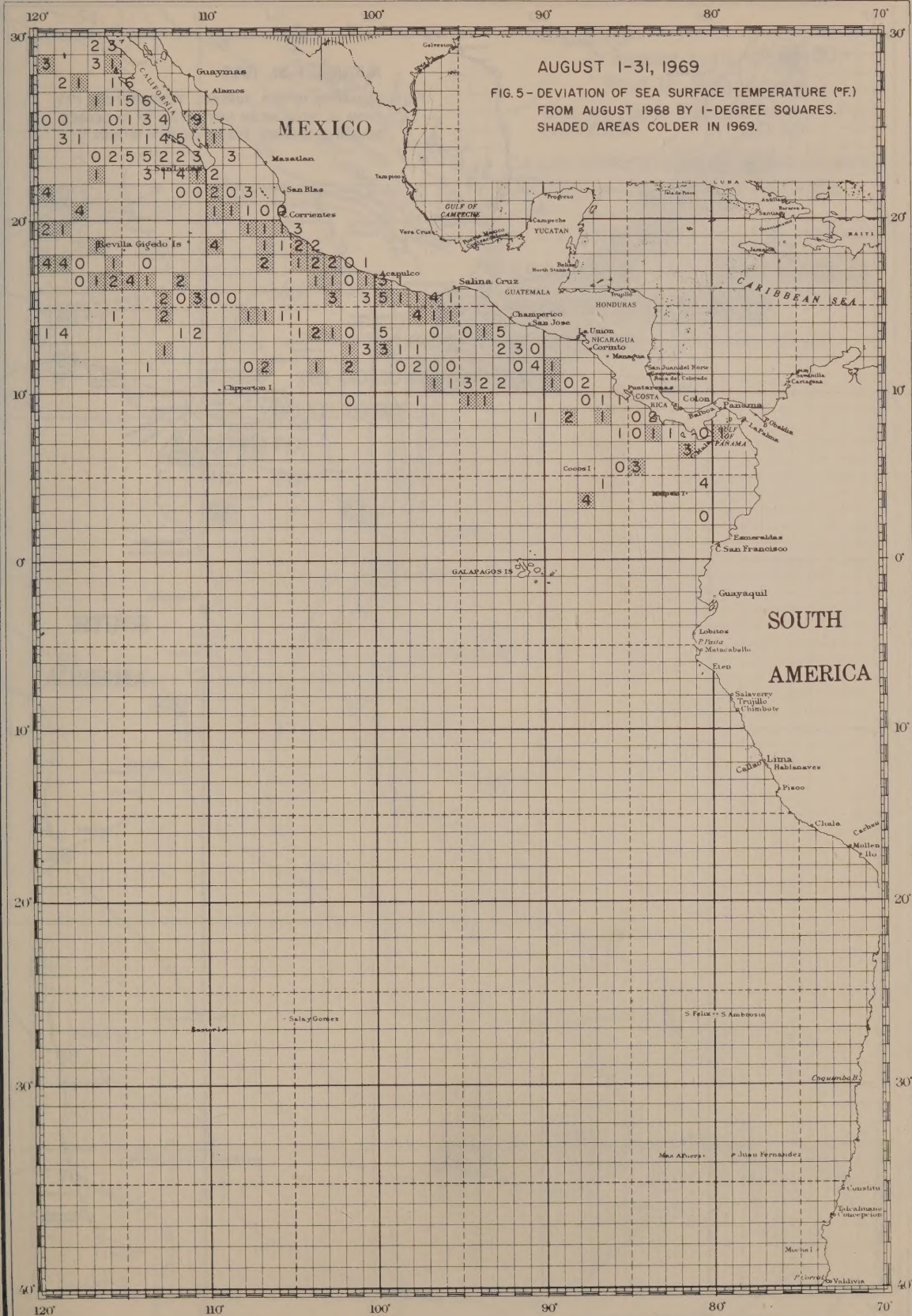
FIG.2-DEVIATION OF SEA SURFACE TEMP. (°F.)
FROM LONG TERM MEAN. HATCHED
AREAS COLDER IN 1969.

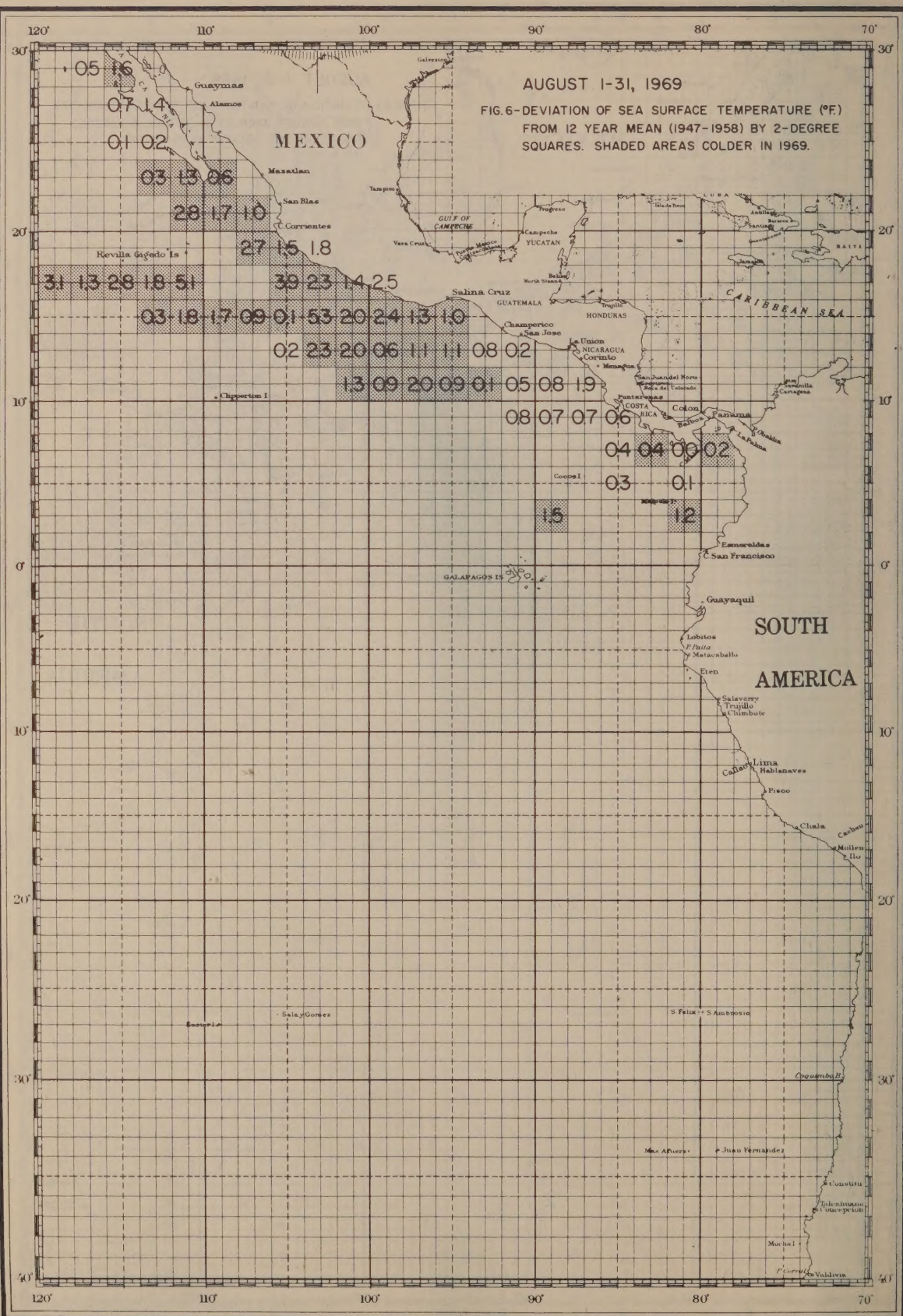


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FIG.3-DEVIATION OF SEA SURFACE TEMP. (°F.)
FROM AUGUST 1968. HATCHED AREAS
COLDER IN 1969.







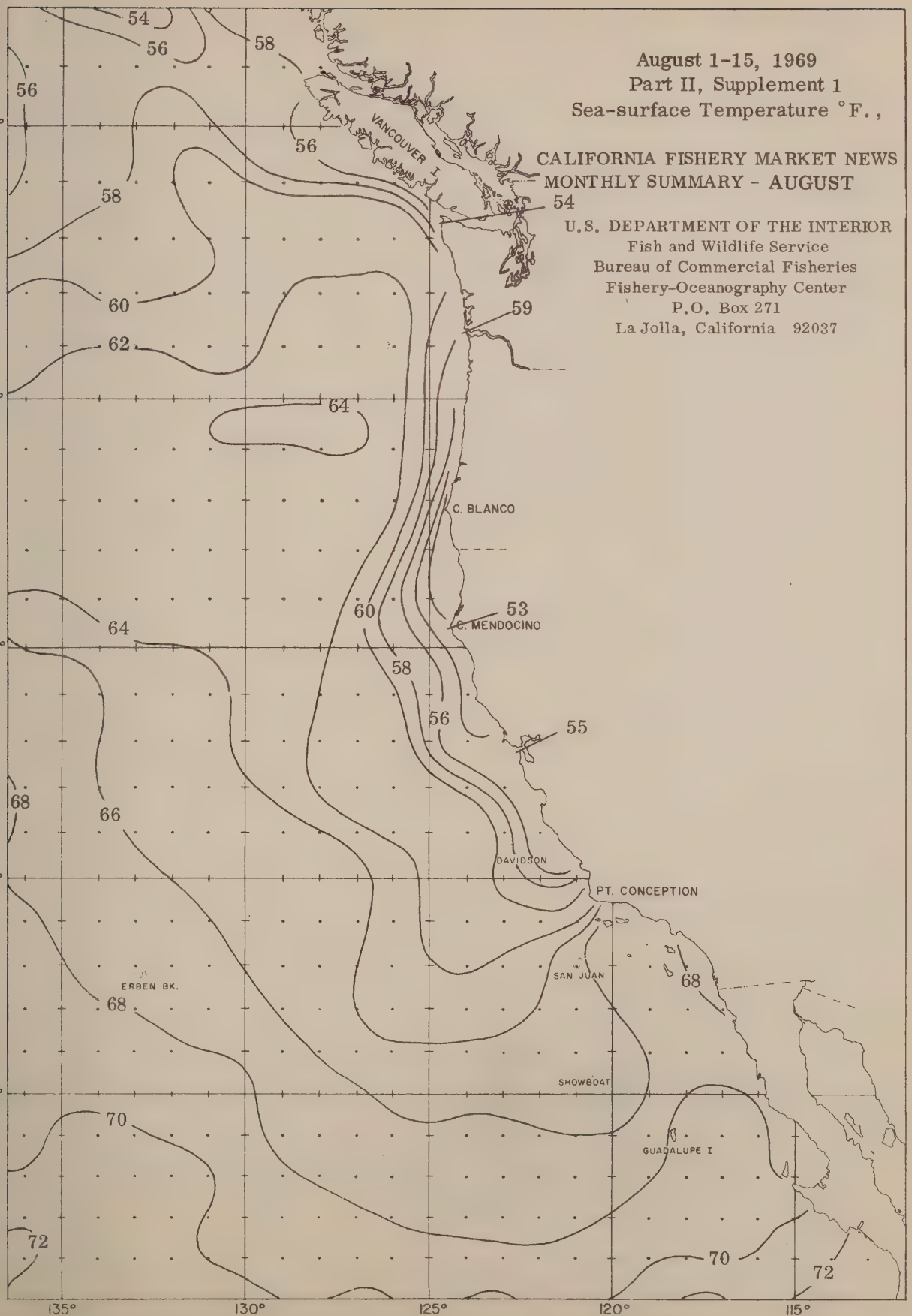
AUGUST 1-31, 1969

FIG. 6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1969.

August 1-15, 1969
Part II, Supplement 1
Sea-surface Temperature °F.,

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P.O. Box 271
La Jolla, California 92037

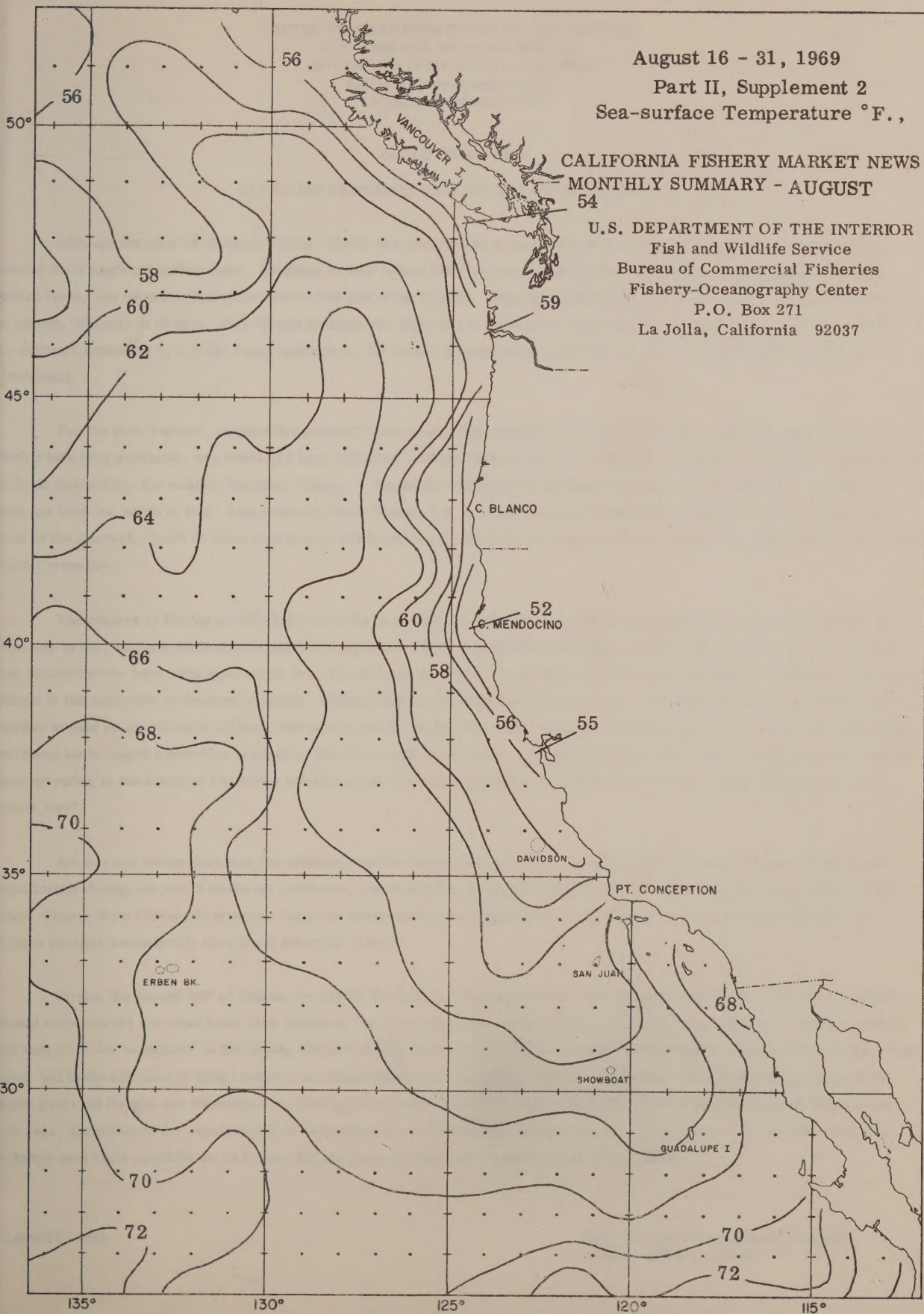


August 16 - 31, 1969
Part II, Supplement 2
Sea-surface Temperature °F.,

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BUREAU OF COMMERCIAL FISHERIES
Fishery-Oceanography Center
La Jolla, California 92037

BULLETIN NO. 69-6

ALBACORE FISHERMEN BRACING FOR MIDDLING SEASON

Although the pace of albacore fishing activity has accelerated during the past 2 weeks, U. S. West Coast fishermen are bracing for a tough production year. Landings to date reflect the slow pace of production: many boats are coming to port with partial fares, and no major concentrations of fish are being located. Landings in Southern California are still among the poorest on record, whereas in Oregon, even though landings are above the long-term average, the totals continue to rise only gradually. We estimate combined U. S. West Coast landings for the season through August will fall between 10 and 15 million pounds (5,000-7,500 tons).

For the past 2 weeks, weather has generally been good in the district north of Cape Blanco. Although overcast skies and brisk winds have prevailed, sea conditions have remained workable during most of the period. Farther south, from Cape Mendocino to Point Conception, the weather has been "sloppy." Except for slack intervals between prolonged windy periods, the entire district has been too rough to fish: wind velocities have averaged 25 to 30 knots and sea heights have ranged from 8 to 14 feet over most of the interval. South of Point Conception, winds and seas have generally been workable east of a line running due south from Point Conception.

The centers of fishing activity have been characteristically transient: production in a given area has been unpredictable from day to day, and new centers have appeared rapidly in areas considerable distances away from the previous ones. No major fish concentrations have been reported to date, but albacore have been found ranging over a very large district offshore from Cape Blanco to the area west of Vancouver Island. Jigboats have not fared as well as last year at this time; jigboats report their total catches to date as significantly off from last year's totals. In the past week, the pace of baitboat activity has begun to accelerate, and these boats report production is ahead of last year at the same time. Commercial-scale production has persisted for a small fleet operating in the Southern California offshore zone, but adverse weather conditions have served to keep landings below last year's level.

Sea surface temperatures in the offshore district appear near average. Upwelling and turbulent mixing have increased significantly during the past 2 weeks off California, and it appears as if the peak of the summer warming cycle has been reached. NASA-Oregon State University airborne radiation thermometer overflights have shown that the width of the upwelled zone off Oregon changes dramatically over short intervals of time.

During the second half of August, we expect the summer heating cycle to reach its peak off Oregon. The 64° F isotherm should move toward the coast from Cape Blanco to the Columbia River, unless strong winds and heavy overcast conditions prevail and thus limit the remainder of the heating which normally takes place. All indications to date suggest lowered fish abundance this year, and boats will have to push harder to maintain satisfactory production levels. In addition, because the areal extent of the warm water off Oregon and Washington is considerably smaller this year, and because the upper mixed layer is not as warm as last year, the potential for rapid cooling is very high once inclement fall weather sets in. All fishermen are therefore urged to schedule port calls carefully so as to take full advantage of the good fishing weather while it lasts.

August 15, 1969

Staff, Fishery-Oceanography Program
Glenn A. Flittner, Leader

